

CHAPTER 14

SOLID WASTE MANAGEMENT AND RESOURCE RECOVERY ASHORE

14-1 Scope

14-1.1 Summary. This chapter identifies solid waste management, affirmative procurement, waste prevention, and recycling policies. All Navy installations worldwide that generate 1 or more tons of solid waste per day must follow the solid waste reporting, solid waste management planning, recycling requirements, and affirmative procurement requirements outlined in this chapter. Requirements derived from the Resource Conservation and Recovery Act (RCRA) and similar statutes apply to installations within the United States, the Commonwealth of Puerto Rico, Guam, American Samoa, U.S. Virgin Islands and the Commonwealth of the Northern Marianas Islands. Chapter 18 discusses additional Navy policy for overseas installations.

14-1.2 Related Chapters. Chapter 12 discusses the management of Hazardous Waste (HW). Chapter 9 covers reclamation and recycling of used oils. Chapter 19 discusses the handling of solid wastes aboard ship.

14-1.3 References.

- a. 29 CFR 1910, Occupational Safety and Health Standards;
- b. 40 CFR 247, Guidelines for Procurement of Products that Contain Recycled Material;
- c. 32 CFR 172 (DOD Instruction 7310.1 of 10 July 1989, Disposition of Proceeds from Sales of Surplus Property);
- d. DOD Memorandum, 18 August 1993, DOD Personal Property Disposal and Recycling. Guidance for personal property disposal and recycling operations; (NOTAL);
- e. 40 CFR 246, Guidelines for Source Separation for Materials Recovery;
- f. DOD Memorandum, 13 May 1998, New DOD Pollution Prevention Measure of Merit;
- g. 40 CFR 243, Guidelines for Solid Waste Storage and Collection;
- h. NAVMED P5010, Manual of Naval Preventive Medicine;
- i. 40 CFR 262.11, Hazardous Waste Determination;
- j. 40 CFR 240, Guidelines For The Thermal Processing Of Solid Wastes;
- k. 40 CFR 268, Regulations on Land Disposal Restrictions;
- l. 40 CFR 257, Regulations on Criteria for Classification of Solid Waste Disposal Facilities and Practices;
- m. 40 CFR 258, Criteria for Municipal Solid Waste Landfills;

- n. Executive Order 13101, Greening the Government through Recycling, Waste Prevention and Federal Acquisition;
- o. DEPSECDEF Memorandum, 28 January 1983, Sales of Recyclable Materials. Interim Guidance for Establishing and Operating a Qualified Recycling Program Establishment and Implementation; (NOTAL);
- p. NEESA 5.0-004, Solid Waste Management Plan (SWMP) Guide; (NOTAL) (available from NFESC);
- q. DOD Instruction 4715.4 Pollution Prevention, 1 July 1998 (NOTAL);
- r. NAVFAC Guide Specification 01572, Waste Management;
- s. DUSD(ES) Memorandum, 15 May 1998, Recycling of Firing-range Scrap Consisting of Expanded Brass and Mixed Metals Gleaned from Firing-Range Clearance Through Qualified Recycling Programs;
- t. NFESC UG-2039-ENV, Qualified Recycling Program (QRP) Guide; July 2000(NOTAL);
- u. 40 CFR 244, Guidelines for Solid Waste Management of Beverage Containers;
- v. Solid Waste Annual Report-Base (SWAR-Base), available from DESCIM, 200 Stoval St. Rm. 12549, Alexandria, VA 22332-2300 or by download from DENIX Website;
- w. NFESC UG-2047-ENV, Calendar Year 2001 Pollution Prevention Annual Data Summary (P2ADS) Guide, November 2001 (or the most current year's guide).

14-2 Legislation

14-2.1 Federal Facilities Compliance Act (FFCA). This law significantly expands the enforcement authority of Federal and State regulators with respect to solid and hazardous waste (HW) management at Federal facilities. FFCA requires Federal facilities to pay any nondiscriminatory fees or service charges assessed in connection with a Federal, State, interstate, or local solid or HW regulatory program.

14-2.2 Military Construction Authorization Act of 1975 (amended 1982). This Act allows an installation to use the proceeds from the sale of recyclable material to cover the costs directly attributable to all installation recycling programs, including, but not limited to, manpower, facilities, equipment, overhead, and other capital investments. After these costs are recovered, installation commanders may use up to 50 percent of the remaining proceeds for pollution abatement, pollution prevention, composting, alternative fueled vehicle infrastructure support and vehicle conversion, energy conservation, or occupational safety and health projects.

Military Construction Codification Act Section 6, 1982. Amends 10 U.S.C 2577 to allow the use of recycling proceeds for morale, welfare, and recreation (MWR) activities.

14-2.3 Occupational Safety and Health Act, 1970, 29 U.S.C. 651 *et seq.* This Act assures safe and healthful working conditions for men and women by authorizing enforcement of the standards developed

under the Act: by assisting and encouraging the States in their efforts to assure safe and healthful conditions; and by providing for research, information, education, and training in the field of occupational safety and health. See reference (a). OSHA is made applicable to federal facilities through Executive Order 12196.

14-2.4 Solid Waste Disposal Act (SWDA) of 1965, as amended by RCRA. SWDA requires that Federal facilities comply with all Federal, State, interstate, and local requirements concerning the disposal and management of solid wastes. Such requirements include permitting, licensing and reporting. The SWDA encourages beneficial reuse of wastes through recycling and burning for energy recovery. The Act also requires Federal agencies to procure EPA guideline products containing recovered materials to the maximum extent possible. The Comprehensive Procurement Guideline is codified as 40 CFR 247. See reference (b).

14-3 Terms and Definitions

14-3.1 Activity. An independent command performing a specific mission having its own Unit Identification Code (UIC).

14-3.2 Affirmative Procurement Program (APP). A preference program for purchasing EPA designated items that contain recycled material content. Navy purchasers are to procure designated items in accordance with APP criteria requirements.

14-3.3 Composting. A controlled process for managing the degradation of plant and other organic wastes to produce a useful product that can be used as mulch or soil conditioner.

14-3.4 Contained Disposal. Landfilling or incineration of solid waste in a permitted facility. This is the least desirable solid waste option and ranks at the bottom of the priority list for integrated solid waste management.

14-3.5 Direct Sales. Competitively selling recyclable materials to a vendor by the managing activity's QRP without utilizing the Defense Reutilization and Marketing Office (DRMO). Direct sales authority is granted to the installation's QRP by the Claimant.

14-3.6 Diversion Rate. The rate at which non-hazardous solid waste is diverted from a disposal facility. Disposal facilities include landfills (both solid waste and inert) and incinerators. Composting, mulching, recycling, reuse, and donation are generally accepted waste diversion methods. The diversion rate equals:

$$\frac{R}{R + L} * 100 = \text{diversion rate (percent)}$$

R = amount (in tons) of non-hazardous solid waste (including recycled construction and demolition debris) that is composted, mulched, recycled, reused, donated, or otherwise diverted from a disposal facility.

L = amount (in tons) of solid waste (including landfilled construction and demolition debris) transferred to a disposal facility.

14-3.7 Energy Recovery. Steam or electrical energy produced from solid waste used as a fuel in a waste to energy plant. All incineration, including energy recovery, is counted as disposal in diversion rate calculation.

14-3.8 Excluded Materials. Materials that may not be sold through a Qualified Recycling Program (QRP). Proceeds from the sale of excluded materials SHALL NOT be returned to a QRP. Per U.S.C. 2577 and reference (c), excluded items include, but are not limited to: government-furnished material; precious metal bearing scrap; hazardous waste (including household hazardous waste); ozone depleting substances; electrical components; unopened containers of solvents, paints, or oil; fuels; material that can be sold (as is) as a usable item; repairable items that may be used again for their original purposes or functions, e.g., used vehicles, vehicle or machine parts, etc.; ships, aircraft, weapons, and other material required to be demilitarized or mutilated, and scrap resulting from demilitarization; all Munitions List Items (MLI) and Strategic List Items (SLI) as defined in DOD 4160.21-M-1 of October 1991 (NOTAL), except firing range expended brass and mixed metals gleaned from firing range cleanup; industrial scrap generated from Working Capital Fund (WCF) activities; usable personal property purchased by WCF activities; property purchased with commissary surcharge funds; automatic data processing equipment owned by the General Services Administration; property purchased for the Military Assistance program or purchased with Foreign Military Sales Administration funds; Coast Guard property; property owned by non-appropriated fund activities; lost, abandoned, or unclaimed privately owned personal property; property owned by a country or international organization; bones, fats, and meat trimmings generated by a commissary.

14-3.9 Facility. For the purposes of this chapter, a facility is a contiguous piece of land with structures, other appurtenances, and improvements under common ownership or control, fence line to fence line.

14-3.10 Managing Activity. An administrative element assigned to manage a recycling program (including personnel, funds, and equipment).

14-3.11 Office Waste. Solid wastes generated by the every day affairs of government workers in government buildings and rooms. Excludes waste generated in cafeterias, snack bars, or other food preparation and sales installations.

14-3.12 Office Workers. Military and civilian personnel other than janitorial and trade specialists.

14-3.13 QRP. A recycling program organized in accordance with the regulations for the sale of installation-generated recyclable material purchased with appropriated funds. An installation with a QRP can retain the sales revenues of scrap or other recycled materials purchased with appropriated funds.

14-3.14 QRP Manager. Position appointed by installation Commanding Officer by instruction to manage the QRP. If direct sales authority is granted by claimant, the QRP Manager has authority to conduct direct sales of recycling material up to \$15,000 per sale commodity.

14-3.15 QRP Recyclable Materials. Any recyclable material that is not an excluded material as described in 14-3.7.

14-3.16 Recyclable Material. A material that can be transformed into a new, useable product through the process of recycling.

14-3.17 Recycling. The result of a series of activities by which materials that would become or otherwise remain waste, are diverted from the solid waste stream by collection, separation, and processing, and are used as raw materials in the manufacture of goods sold or distributed in commerce, or the reuse of such materials as substitutes for goods made of virgin materials. For purposes of a QRP, scrap metal is a recyclable material (reference (d)).

14-3.18 Recycling Program. An organized operation that requires concerted efforts to divert or recover scrap or waste from waste streams, as well as efforts to identify, segregate, and maintain the integrity of the recyclable materials in order to maintain or enhance their marketability.

14-3.19 Resource Recovery. The recovery of materials or energy from solid waste.

14-3.20 Resource Recovery Facility. Any physical plant that processes non-hazardous, commercial, or institutional solid waste, biologically, chemically, or physically and recovers useful products, such as shredded fuel, combustible oil or gas, steam, metal, and glass for resale or reuse.

14-3.21 Solid Waste. Any garbage, refuse, or sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but not including solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits under section 1342 of Title 33, or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923) [42 U.S.C.A Sect. 2011 *et seq.*].

14-3.22 Source Reduction (Pollution Prevention). Reducing, at the point of introduction into the process, the volume or weight of material used before the products are purchased, used or discarded. This includes reuse of materials, items, or products prior to recycling and/or disposal.

14-3.23 Source Separation. The separation of recyclable materials at their point of generation by the generator. See reference (e).

14-3.24 Waste Office Paper. Letterhead, dry copy papers, miscellaneous business forms, stationary, typing paper, tablet sheets, and computer printouts. Classified wastes are explicitly excluded, except as allowed by applicable security directives.

14-4 Requirements

14-4.1 DOD Measure of Merit. Per reference (f), DOD has set the following Non-Hazardous Solid Waste Diversion Rate Measure of Merit (MOM) for all DOD installations:

“By the end of FY 2005, ensure that diversion rate for non-hazardous solid waste is greater than 40 percent, while ensuring integrated non-hazardous solid waste management programs provide an economic benefit when compared with disposal using landfilling and incineration alone.”

14-4.2 Solid Waste Collection and Storage. Federal, State, and local requirements concerning collection and storage apply to military facilities generating solid wastes, whether the solid waste is collected by the military or by a non-military collector. See references (g) and (h).

Reference (i) requires any person who generates solid waste to determine if that waste is a hazardous waste. Refer to Chapter 12 for hazardous waste determination and management requirements.

14-4.3 Source Reduction. Federal, State, and local requirements concerning source reduction (pollution prevention) apply to Navy facilities. This technique of preventing waste is the preferred method of managing solid waste.

14-4.4 Solid Waste Resource Recovery

14-4.4.1 Resource Recovery Alternatives. Alternatives for disposition of recovered materials include:

- a. Sale of recovered materials through the Defense Logistic Agency (DLA).
- b. Participation in existing or planned civilian community or commercial resource recovery facilities or systems. Where warranted, such participation may include funding a pro rata share of a community facility.
- c. Donation of waste materials to a voluntary or community organization, even when the materials are located on DOD-owned, leased, or occupied facilities if:
 - (1) Materials were not government purchased or generated.
 - (2) Materials, while owned or generated by DOD, are uneconomical for government supported collection and disposal.
- d. Direct sale of recovered material by authorized shore installations.

14-4.4.2 Recyclable Materials Sales Program. Installations with QRP programs shall first use recyclable materials sales proceeds to cover the costs directly attributable to all installation recycling programs, including, but not limited to, manpower, facilities, training, program awareness expenses, equipment, overhead, and other capital investments. After these costs are recovered, installation commanders may use up to 50 percent of the remaining proceeds for pollution abatement, pollution prevention, composting, alternative fueled vehicle infrastructure support and vehicle conversion, energy conservation, or occupational safety and health projects, with first consideration given to projects included in the installation's pollution prevention plans. Any remaining proceeds may be transferred to the non-appropriated Morale, Welfare, and Recreation account for any approved programs or retained in the QRP suspense account to cover anticipated future program costs.

14-4.5 Solid Waste Disposal. Local requirements apply to solid waste disposal operations on Federal property, regardless of whether Federal or other sources create the waste. Installations shall comply with local requirements for solid waste disposal operations off Federal property if the agency has direct management control of the disposal operation.

14-4.5.1 Incineration of Solid Waste. Federal, State, and local requirements apply to incineration facilities designed to process 50 tons of solid waste or more per day. Installations shall interpret the application of capacity emission standards established by EPA, State, or local agencies. They shall sufficiently treat all waters discharged from the facility to meet applicable effluent limitation standards. They shall obtain all necessary permits.

An installation shall operate an incineration facility for solid wastes in conjunction with a final land disposal facility. Land disposal is required, under EPA guidelines and applicable State regulations, for residues from the incineration operation and those non-hazardous wastes that cannot be incinerated for reasons of health, safety, or technological limitation. Installations will use only those land disposal facilities with appropriate operating permits for residues and non-combustible materials. See reference (j).

14-4.5.2 Disposal in Military-Owned Landfills. Installations shall design, construct, and operate land disposal sites to protect the health and safety of personnel associated with their operation. They shall apply pertinent provisions of the Occupational Safety and Health Act and attendant regulations per reference (a).

They shall locate, design, construct, and operate the land disposal site to minimize environmental hazards and conform to the most stringent of applicable Federal, State, or local standards and requirements (references (k), (l), and (m)).

14-4.6 Affirmative Procurement. Installations shall follow affirmative procurement programs for the purchase of EPA guideline items that contain recycled materials. Section 6002 of RCRA and references (b) and (n) mandate and support Affirmative Procurement. These guidelines recommend procedures for developing the programs to ensure that the specifications for, and the procurement actions taken, shall result in the increased use of recycled materials contained in the following product categories:

- a. Construction products
- b. Landscaping products
- c. Non-paper office products
- d. Paper and paper products
- e. Park and recreation products
- f. Transportation products
- g. Vehicular products
- h. Miscellaneous products

Section 6002 of RCRA requires the Navy to review annually the effectiveness of its affirmative procurement program and provide a report of its findings to the EPA's Office of Federal Procurement Policy (OFPP) by 15 December of each year.

Reference (n) requires that procuring agencies purchase printing and writing paper which contains a minimum of 30 percent post consumer content effective 1 Jan 99. This includes all high speed copier paper, offset paper, forms, bond, computer printout paper, carbonless paper, file folders, white woven envelopes, writing and office paper, book paper, cotton fiber paper and cover stock.

Affirmative procurement items, purchasing criteria, and general APP information is listed at EPA web site <http://www.epa.gov/epaoswer/non-hw/procure/index.htm>. Note that new items are added yearly.

14-5 Navy Policy

14-5.1 Property. Navy installations shall consider solid waste generated by Navy operations and actions on a Navy installation as government property for purposes of disposal except in those instances where Navy exchanges and commissary stores salvage and dispose of their recoverable resources. Contractors shall manage solid waste they generate on a Navy installation under the requirements of their contracts (See reference (o).)

14-5.2 Navy Solid Waste Management Programs. All Navy installations worldwide that generate 1 ton or more of solid waste per day shall develop and implement Solid Waste Management Plans (SWMPs). The SWMP is a comprehensive study of all aspects of the activity's solid waste management program. It is the essential tool for developing and maintaining a solid waste program in compliance with all Federal, State, and local regulations and DOD/Navy instructions. A SWMP includes legal and regulatory framework, waste characterization, existing collection and disposal systems, recycling program assessment, source reduction, record keeping, assessments of future processing and disposal facilities, education and information, institutional needs, and assignment of responsibilities for carrying out various actions required of the plan. Installations shall refer to reference (p) for guidance developing these plans.

Installations shall design these programs as total systems that consider relative economic advantages of the latest technology as well as the potential for resource recovery. Installations shall develop SWMPs using the following priority basis:

- a. Source reduction
- b. Reuse
- c. Recycling
- d. Disposal via landfill or incineration

Note that installations need not containerize all solid waste prior to disposal (but must place it in appropriately designed and constructed landfills).

14-5.3 Solid Waste Disposal Facilities. The Navy shall not open new solid waste disposal facilities except where it is in the clear interest of the Navy.

Navy-owned landfills shall be designed to meet the most stringent of Federal, State, or local regulations.

Installations shall not burn Navy waste materials including trash, rubbish, garbage, construction debris, and liquid wastes, in open fires (except in limited situations as determined by health or safety considerations and with the approval of the appropriate local agency, State agency, and EPA regional office).

14-5.4 Source Reduction. Installations shall incorporate the following in Navy source reduction or pollution prevention programs, where feasible:

- a. Reduction of packaging, especially where packaging is used primarily for attractive merchandising or convenience functions.

- b. Process modifications.
- c. Procurement of materials that generate less solid waste.
- d. Reduction of waste generation in the office by:
 - (1) Reusing materials (i.e., file folders, paper clips, interoffice routing envelopes, etc.).
 - (2) Dual-sided copying.
 - (3) Using electronic mail instead of paper memos.
 - (4) Reduced mailing and distribution lists.
 - (5) Duplex Printing.
- e. Maximum use of the General Supply Administration (GSA) supply system for paper and paper products.
- f. Good housekeeping or best management practices.
- g. Employee training.
- h. Any reasonable mechanism that successfully avoids, prevents, or reduces solid waste at the source.

14-5.5 Solid Waste Resource Recovery

14-5.5.1 Recycling. Navy installations shall comply with Federal, State, and local recycling laws, regulations, and policies. All Navy installations, except small, isolated facilities such as reserve centers, shall implement source separation for recycling and develop a single authorized QRP. The host activity at an installation shall ensure that there is a recycling program at the installation. The host usually administers the QRP. However, the host may delegate the QRP to a tenant activity at the installation.

Commissary and Navy exchanges may operate authorized recycling programs outside a QRP.

Reference (q) provides guidance for the establishment or abolition of resource recovery and source separation programs.

All construction and demolition (C&D) projects awarded to contractors at naval installations shall include a Construction Waste Management Plan for C&D debris, per reference (r). The Construction Waste Management Plan shall evaluate and determine the extent of recycling, reuse, and composting possible for the project.

An installation shall establish a recycling program for the following purposes:

- a. To comply with Federal, State, and local environmental laws and regulations and reference (n).

- b. To reuse readily available resources.
- c. To avoid excessive costs for disposal of solid waste by other means (cost avoidance).
- d. To reduce the volume of wastes disposed of in landfills and incinerators.
- e. To meet DOD MOM goals per reference (f).
- f. To obtain proceeds from the sale of recyclable materials.

14-5.5.1.1 Installations shall separate the following materials for recycling:

- a. Scrap metal (ferrous and nonferrous)
- b. High-grade paper
- c. Corrugated containers (e.g. cardboard)
- d. Aluminum cans
- e. Newspapers
- f. Magazines
- g. Office paper
- h. Plastics
- i. Wood
- j. Other materials as market conditions allow

Installations may recycle scrap metal through a QRP, including firing range-expended cartridge cases and mixed metals gleaned from range clearance that do not require demilitarization and that have been certified safe. They shall sell all other scrap from ammunition, explosives and dangerous articles (AEDA), even if certified safe, through the Defense Reutilization and Marketing Service. Trained personnel designated in writing by the commanding officer shall certify safe all firing range scrap consisting of expended cartridge cases and mixed metals gleaned from range clearance prior to any QRP accepting the material for disposal. See reference (s).

14-5.5.1.2 The recycling manager shall either conduct or request from DRMO a recovered materials market analysis, including estimated return from sale and length of market availability prior to any source separation effort.

The recycling manager shall maintain economic analysis and market determination on file at the managing activity and incorporate the resulting information into the SWMP.

14-5.5.1.3 The recycling manager is not restricted to the items listed in paragraph 14-5.4.1.1 but may add any suitable material to those being recycled. As a general rule, installations shall recycle all non-hazardous solid waste where the cost of recycling is less than the cost of disposal.

14-5.5.2 Goals. Navy major claimants shall achieve DOD solid waste reduction and recycling goals, known as Measures of Merit (MOM) per reference (f). The Department of Defense has established a Non-hazardous Solid Waste Diversion Rate of 40 percent by the end of FY 2005. This goal also requires the defense components to ensure that integrated non-hazardous solid waste management programs provide an economic benefit when compared with disposal using landfill and incineration alone. To achieve this goal, shore activities will have to increase source reduction, recycling and composting. The Solid Waste Annual Report software and Pollution Prevention Annual Data Summary (P2ADS) track this goal. BRAC activities which have been officially closed and which have been transferred to Naval Facilities Engineering Command ownership are not required to report solid waste data in their P2ADS.

14-5.5.3 Qualified Recycling Programs. Only installations that have a QRP are authorized to receive proceeds from the sales of recyclable materials.

Installations that want to conduct direct sales of recyclable materials purchased with appropriated funds shall submit a request to their major claimant for approval. The request is subject to oversight by CNO (N45). Installations shall forward a copy of direct sales approval letter to CNO (N45). Managing activities with a QRP must conduct direct sales in accordance with references (c), (q) and (t) and will be subject to Environmental Quality Assessment (EQA), audits, inspections, and other oversight.

Reference (t) provides guidance for setting up a QRP and establishing and operating a qualified recycling program at Navy and Marine Corps installations. A QRP includes the following program requirements:

- a. A managing activity designated by the installation commanding officer. Potential managing units are the environmental department, the supply department, the public works department, or the MWR department.
- b. A QRP Manager shall be appointed by the Installation Commanding officer.
- c. Means for maintaining fiscal accountability for all funds received and disbursed.
- d. Maintenance of records of the quantity and types of materials sold for recycling.
- e. Review of all projects funded with the proceeds of recycling sales by the same chain of command that would normally review such projects if funded from normal appropriations.
- f. Specific implementation of recyclable material sales requirements contained in this instruction.
- g. Notify DRMO that the installation has a QRP as established by the Military Construction Codification Act and that the QRP is implemented by a directive or instruction.

14-5.5.3.1 After the establishment of an organized QRP or concurrent with such program development, the installation shall coordinate with DRMO to determine whether the specific materials to be sold are actually QRP recyclable materials. Scrap paper, officer paper, cardboard, wood, glass and other obvious scrap can be sold via the QRP. Excluded items are not to be sold by the QRP. The QRP manager, DRMO chief, or an item manager can determine if an item is scrap eligible for the QRP. A

usable item may be downgraded to scrap if it has no value except for its material content. If a dispute occurs, refer the matter through the chain of command for resolution. The managing activity can sell recycling materials through DRMO or by direct sales if the major claimant grants such authority. DRMO will return net proceeds (selling price of recycled materials minus handling fees) to the QRP.

14-5.5.3.2 Navy installations with a QRP shall deposit proceeds from the sale of recyclable materials to **F3875 "Budget Clearing Account (suspense)." Fiscal year end does not affect the accumulation of funds in **F3875, so installations may carry forward and merge proceeds from one fiscal year with proceeds of subsequent fiscal years. Reference (c) details the disposition of proceeds from the sale of recycled material.

14-5.5.3.3 Installations shall first use sales proceeds to cover the costs directly attributable to all installation recycling programs, including, but not limited to, manpower, facilities, equipment, overhead, and other capital investments. After these costs are recovered, installation commanders may use up to 50 percent of the remaining proceeds for pollution abatement, pollution prevention, composting, alternative fueled vehicle infrastructure support and vehicle conversion, energy conservation, or occupational safety and health projects, with first consideration given to projects included in the installation's pollution prevention plans. Installations may transfer any remaining proceeds to the non-appropriated MWR account for any approved programs or retain them in the QRP suspense account for investment in the recycling program or use them to cover anticipated future program costs.

14-5.5.3.4 The Pollution Prevention Equipment Program (PPEP) provides solid waste and recycling equipment to recycling programs including the QRP. See Chapter 3, Pollution Prevention for program details.

14-5.5.3 Resource Recovery Facilities. Installations shall consider construction of dedicated Navy resource recovery facilities only after thoroughly studying alternative methods of processing recovered materials.

14-5.5.4 Returnable Beverage Containers. Navy installations in States with beverage container recovery laws already in force shall comply with State laws. The installation should bring any conflicts between Federal (reference (u)) and State requirements, as well as any situations that preclude compliance, to the attention of CNO (N4), DCNO (Logistics).

14-5.5.5 Records. To determine solid waste management requirements, each installation shall keep records of solid waste disposal and of materials recycled. Installations shall keep records by the actual weight measurement (in tons) and also by material and product type. Each installation shall also keep records of quantities (measured by actual weight) and types of wastes that are recycled, proceeds from the sale of recyclable materials, and avoided costs for disposal.

Installations shall maintain records for the quantities of waste disposed and recycled by C&D contractors. Materials recycled by a C&D contractor shall be counted as recycled when calculating the installation's Diversion Rate.

Defense Environmental Security Corporate Information Management (DESCIM) Solid Waste Annual Report (SWAR)-based (reference (v)) software is available from DESCIM for installations to manage their solid waste program and prepare their SWAR. Directions for electronic submittal of the SWAR through the Defense Environmental Network and Information Exchange Bulletin Board System (DENIX BBS) are available from NFESC.

14-5.6 Composting. Installations shall compost organic waste as an alternative to land filling whenever possible. Installations shall compost landscaping cuttings, yard and green waste, limbs, branches, and other organic materials suitable for composting at a facility at the shore activity or at a municipal or private facility. Installations shall consider the following composting alternatives when determining the most feasible composting method:

- a. Establish backyard composting plans for housing
- b. Require landscaping contractors to deposit green waste at a composting facility. Records of the amount composted are then reported in the SWAR-Base software or the P2ADS, paragraph 14.5.7
- c. Use municipal or regional composting facilities (regional composting facilities' tipping fees are almost always less than landfill tipping fees).
- d. Establish composting facilities at the installation if municipal composting facilities are not available or feasible.

14-5.7 Navy Solid Waste Annual Report. All Navy shore activities worldwide that generate more than 1 ton per day of solid waste shall prepare an annual report per guidance provided by the Naval Facility Engineering Service Center (NFESC) (Report Symbol DD-A&T(SA) 1485 (5090)). Mail the report to NFESC no later than 16 March following the end of the calendar year, with copies to the major claimant and EFD. Detailed guidance for installation solid waste reporting is provided in a data call package from NFESC, reference (w). Information obtained from the installation solid waste annual report will be used to track the MOM goal progress.

Host installations shall report solid waste data for all DOD detachments and tenants that reside on the installation. Tenants need not submit separate solid waste data reports to their service. For example, a Navy detachment on a Marine Corps installation need not submit a solid waste report to the Navy because the Marine Corps will report their data.

14-5.8 Solid Waste Training. Solid waste and recycling managers should budget for necessary training to ensure that their programs make progress to reach the goals and guidelines established in references (f), (n), and (q). Suggested training venues include the Department of Defense Solid Waste/Recycling Workshop held during the Solid Waste Association of North America (SWANA) annual convention, QRP and Metals Identification Course, Ammunition Explosive and other Dangerous Articles (AEDA) Awareness Training, and the Annual Navy Pollution Prevention Conference.

Training topics should include QRP management, sales management, financial management, sales procedures, budgeting, AEDA requirements, metals identification, qualified and non-qualified scrap identification, and recycling techniques.

14-6 Responsibilities

14-6.1 COMNAVFACENGCOM shall

- a. Be the technical focal point for solid waste management issues.

- b. Maintain appropriate technical directives, design manuals, and operation manuals concerning solid waste source reduction, collection, storage, disposal, affirmative procurement, and resource recovery.
- c. Assist, as requested, commanders and commanding officers of shore activities in developing resource recovery programs and SWMPs.
- d. Develop and maintain solid waste reporting and information collecting systems.
- e. Prepare and issue annual solid waste data from the information collected.
- f. Ensure that all contracts include, to the maximum extent practical, clauses or provisions that require contract deliverables that meet the affirmative procurement guidelines for recycled material content.
- g. Collect information to prepare the annual affirmative procurement program report for Office of Federal Procurement Policy (OFPP).

14-6.2 COMNAVSUPSYSCOM shall

- a. Investigate and develop methods to reduce packaging of materials supplied to the Navy.
- b. Develop specifications for the purchase of items manufactured with recyclable materials.
- c. Ensure that all contracts include, to the maximum extent practical, clauses or provisions that require contract deliverables that meet the affirmative procurement guidelines for recycled material content.
- d. Provide affirmative procurement guidance to procurement community-contract officers, purchasing agents, supply corps officers, supply department managers, and customers. The guidance should address identification of NSN, GSA, and local purchase affirmative procurement products and items, keeping records of total value of affirmative procurement items purchased and ensuring that affirmative procurement practices are followed.

14-6.3 Major claimants and subordinate commands shall:

- a. Ensure that installations under their command comply with current Federal requirements as well as applicable requirements of State, interstate, or local solid waste management agencies.
- b. Ensure that all contracts include, to the maximum extent practical, clauses or provisions that require contract deliverables that meet the affirmative procurement guidelines for recycled material content.
- c. Ensure that sufficient quantities of solid waste are diverted from landfilling and incineration across the claimancy to achieve a 40 percent diversion rate by the end of FY 2005. Rather than requiring each separate installation to achieve the 40 percent diversion rate, this requirement applies to the major claimant for all subordinate installations in aggregate.

14-6.4 Commanding officers of shore activities shall:

- a. Establish recycling programs that divert sufficient quantities of solid waste from landfilling and incineration in order to support the major claimant's requirement of meeting a 40 percent diversion rate across the claimancy by the end of FY 2005.
- b. Develop SWMPs, including source reduction and recycling programs and resource recovery facilities that incorporate all Federal, State, and local requirements.
- c. Cooperate with the installation or lessor providing solid waste collection and disposal services to establish source reduction, separation programs, and affirmative procurement programs, if in a tenant status.
- d. Cooperate with the designated standard metropolitan statistical area (SMSA) lead agency, if in a listed SMSA.
- e. Report annual solid waste information per guidance provided by NFESC.
- f. Ensure that all contracts include, to the maximum extent practical, clauses or provisions that require contract deliverables that meet the affirmative procurement guidelines for recycled material content.

14-6.5 Commanding officers of fleet activities shall cooperate with the host activity while in port and comply with the activity's solid waste management requirements.